

CLAIMS

1. A fire control system for an elevator wherein remainders inside
a building are rescued to an evacuation floor upon activation of a
5 fire detector provided inside said building, characterized in
comprising:

an evacuation-time calculating means for calculating as the
evacuation time the time for the fire and smoke to reach the
elevator hall of each floor;
10 a rescue floor judging means for judging as a rescue floor a
said floor of which said evacuation time is longer than the
time required for making said car to newly respond to a rescue
call from said evacuation floor, and as a non-rescue floor
a said floor of which said evacuation time is shorter than
15 the time required for making said car to newly respond to
a rescue call from said evacuation floor;
a rescue-operation-order determining means for determining the
order in which rescue operation is to be carried out among
said rescue floors; and
20 a rescue operation means for carrying out rescue operation of
said car in accordance with said order.

2. The fire control system for an elevator according to claim 1,
further characterized in that the rescue-operation-order determining
25 means is based on an evacuation-time sequential system wherein rescue
operation is carried out from the rescue floor of which the evacuation
time is the shortest.

3. The fire control system for an elevator according to claim 1,
30 further characterized in that the rescue-operation-order determining
means is based on a remainder-number sequential system wherein rescue

operation is carried out from the rescue floor of which the number of remainders is the largest.

4. The fire control system for an elevator according to claim 3,
5 wherein the number of remainders is calculated by subtracting the number
of evacuees rescued by rescue operation of the elevator at a point
of time from an initial value, where said initial value is the number
of persons obtained by subtracting the estimated number of
emergency-staircase-evacuees from the pre-registered enrollment of
10 each floor.

5. The fire control system for an elevator according to claim 3,
wherein the number of remainders is the number of persons obtained
by subtracting the number of persons who have departed each floor by
15 means of an elevator from the number of persons who have entered the
floor by means of an elevator.

6. The fire control system for an elevator according to claim 3,
wherein the number of remainders is the number of persons detected
20 by images photographed by a photographing means provided in the elevator
hall of each floor.

7. The fire control system for an elevator according to claim 1,
wherein the rescue operation means is a means to rescue remainders
25 by selecting a rescue floor in the order determined by the
rescue-operation-order determining means and activating all cars
simultaneously towards the selected rescue floor.

8. The fire control system for an elevator according to claim 1,
30 wherein the rescue operation means is a means selects a rescue floor
in the order determined by the rescue-operation-order determining means,
assigns and activates from the evacuation floor the number of cars

required to transport the remainders on the selected rescue floor,
sequentially assigns and activates the number of cars necessary from
the remaining cars for carrying said remainders on said rescue floors
in the following orders to said evacuation floor in accordance with
5 the order determined by the rescue-operation-order determining means.

9. The fire control system for an elevator according to claim 1,
wherein a hall rescue-operation indicating means is for indicating
the judgment of the rescue floor judging means is provided in an elevator
10 hall.

10. The fire control system for an elevator according to claim 1,
wherein a car rescue-operation indicating means is for indicating the
judgment of the rescue floor judging means is provided inside a car.

15 11. The fire control system for an elevator according to claim 1,
wherein at least one fire door is provided in the elevator hall of
a each floor, and said elevator hall of a floor judged as a non-rescue
floor is separated by said fire door.

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